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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/764,252

01/23/2004

Yang Wang

8020

7590

11/14/2005

YANG WANG

7 Black Bear Lane

WESTFORD, MA 01886

EXAMINER

VANORE, DAVID A

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,252

Applicant(s)

WANG, YANG

Examiner

David A. Vanore

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,29,30,33-35,37,38,41-44,47,48,50,51,61,64 and 68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,7,29,30,33-35,37,38,41-44,47,48,50,51,61,64 and 68 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see the response, filed October 25, 2005, with respect to claims 1, 4, 5, 64, and 68 have been fully considered and are persuasive. The rejection of claims 1, 4, 5, 64, and 68 under 35 USC 102(b) in view of Franzen et al. (5,468,958) has been withdrawn.
2. The examiner thanks the applicant for the amendment to the claims and the telephone interview conducted on October 20, 2005.
3. The amendments to the claims have overcome the rejection under 35 USC 112, second paragraph and 35 USC 101 in light of Ex Parte Lyell [17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990)].
4. Claims 2, 8-26, 31, 35, 39, 45, 53-55, 62-63, and 65-67 stand withdrawn. The examiner attempted to request an examiner's amendment by telephone on November 8, 2005, but was unsuccessful.

Allowable Subject Matter

5. Claims 1, 3-5, 7, 29-30, 33-35, 37-38, 41-44, 47-48, 50-51, 61, 64, and 68 are allowed.
6. Claims 1, 4, 5, 64, and 68 are allowable for the following reasons:
7. The following is a statement of reasons for the indication of allowable subject matter:
8. The main reason for the allowance of claims 1, 4, 5, 64, and 68 over the prior art, especially that of Franzen et al. (USPN 5,468,958) is that the prior art, and the most

Art Unit: 2881

relevant prior art of Franzen et al. fail to teach the ion trap and cap electrode geometry required in at least claims 1 and 68, where there is further applied a DC potential and associate means for generating said DC potential. The prior art, especially Franzen et al., do teach the ion trap elements including the cap electrode geometry required in the claim, but teach only the application of time varying RF potentials to effect ion trapping. There is no teaching or suggestion to further introduce a DC component into such a trap. Therefore, claims 1 and 68, and the dependent claims of independent claim 1, claims 4, 5, and 64, are allowable over the prior art.

9. Claims 3, 7, 29-30, 33-35, 37-38, 41-44, 47-48, 50-51, and 61 are allowable for the reasons previously set forth.

Conclusion

10. This application is in condition for allowance except for the following formal matters:

Claims 2, 8-26, 31, 35, 39, 45, 53-55, 62-63, and 65-67 stand withdrawn from consideration and must be cancelled in order for the application to pass to issue.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

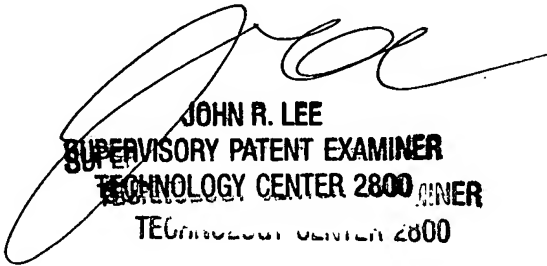
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Vanore whose telephone number is (571) 272-2483. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David A Vanore
Patent Examiner
Art Unit 2881

dav



JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800
TECHNOLOGY CENTER 2800